

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (Currently Amended) A method of identifying a reagent that ~~modulates~~ reduces a lipid comprising the steps of:

- (a) exposing said reagent to a HBM or Zmax1 nucleic acid, or to a HBM or Zmax1 polypeptide HBM or Zmax1;
- (b) determining whether said reagent binds to said nucleic acid or to said polypeptide HBM or Zmax1;
- (c) administering said reagent that binds to said nucleic acid or said polypeptide to an animal or a cell, and determining whether said reagent ~~modulates~~ reduces said [[a]] lipid in said animal or said cell.

Claim 2. (Previously Presented) The method of claim 1, wherein said reagent is a protein, an mRNA, or an antisense nucleic acid.

Claims 3-5. Cancelled.

Claim 6. (Currently Amended) A method for identifying reagent that reduces ~~modulates~~ a lipid comprising:

- (A) identifying a first molecule that binds to a nucleic acid of SEQ ID NO: 1, ~~a Zmax1 nucleic acid comprising a polymorphism of Table 4, except for the C/A base change at location 21119 (308G), or SEQ ID NO: 2;~~
- (B) measuring the binding of the first molecule to SEQ ID NO: 1 or ~~[[,]]~~ SEQ ID NO: 2, ~~or the Zmax1 nucleic acid comprising polymorphism; and,~~
- (C) ~~comparing the extent of binding of the first molecule to each nucleic acid sequence, wherein the molecule that binds, or inhibits binding, more or less to the HBM nucleic acid sequence of SEQ ID NO: 2 versus the Zmax1 nucleic acid sequence of SEQ ID NO: 1 or a Zmax1 nucleic acid comprising a polymorphism of Table 4, except for the C/A base change at location 21119 (308G), is the candidate molecule; and~~
- (C) administering said molecule that binds to SEQ ID NO: 1 or 2 to a cell and determining whether said molecule that binds reduces said lipid in said cell.

Claim 7. (Currently Amended) The method of claim 6, wherein the ~~candidate molecule~~ reagent is a protein, an mRNA, or an antisense nucleic acid.

Claims 8-47. Cancelled.

Claim 48. (Currently Amended) The method of claim 1, wherein the nucleic acid or the polypeptide ~~HBM or Zmax1~~ is in solution.

Claim 49. (Currently Amended) The method of claim 1, wherein the nucleic acid or the polypeptide ~~HBM or Zmax1~~ is affixed to a solid support.

Claim 50. (Currently Amended) The method of claim 1, wherein the polypeptide ~~HBM or Zmax1~~ is located on a cell surface.

Claim 51. (Currently Amended) The method of claim 1, wherein the polypeptide ~~HBM or Zmax1~~ is expressed by a host cell.

Claim 52. (Currently Amended) The method of claim 48, wherein step (b) is determined by exposing said reagent in a mixture with a known ligand to the nucleic acid or polypeptide, ~~HBM or Zmax~~ and assessing competitive binding of said reagent ~~agent~~ to said known ligand.

Claim 53. (Currently Amended) The method of claim 1, wherein the polypeptide is SEQ ID NO: 4 ~~HBM is SEQ ID NO:4~~.

Claim 54. (Currently Amended) The method of claim 2, wherein binding of said reagent is identified by co-immunoprecipitation with the polypeptide ~~HBM or Zmax1~~.

Claim 55. (Currently Amended) The method of claim 2, wherein binding of said reagent is identified by co-fractionation with the polypeptide of SEQ ID NO: 3 or 4 ~~HBM or Zmax1~~.

Claim 56. (Currently Amended) The method of claim 2, wherein binding of said reagent is identified by binding to said polypeptide ~~HBM or Zmax1~~ via a two-hybrid system in which a bait vector encodes an extracellular domain of said polypeptide ~~HBM or Zmax1~~.

Claim 57. (Currently Amended) The method of claim 1, further comprising determining whether said reagent differentially binds to SEQ ID NO: 1 and 2, or to SEQ ID NO: 3 or 4 Zmax1 versus HBM.

Claim 58. (Currently Amended) The method of claim 1, wherein said reagent binds to [[HBM]] SEQ ID NO: 2 or 4.

Claim 59. (Currently Amended) The method of claim 1, wherein said reagent binds to [[Zmax1]] SEQ ID NO: 1 or 3.

Claim 60. (Currently Amended) The method of claim 1, wherein said reagent binds to SEQ ID NO: 1 and 2, or to SEQ ID NO: 3 and 4 HBM and to Zmax1.

Claim 61. (Cancelled)

Claim 62. (Currently Amended) The method of Claim 58, wherein the reagents binds SEQ ID NO: 4 HBM is a protein.

Claim 63. (Currently Amended) The method of Claim 59, wherein the reagent binds SEQ ID NO: 3 Zmax1 is a protein.

Claim 64. (Currently Amended) The method of Claim 60, wherein the reagent binds SEQ ID NOS: 3 and 4 Zmax1 and HBM are protein.

Claim 65. (Previously Presented) The method of Claim 2, wherein said reagent is a protein.

Claim 66. (Currently Amended) The method of Claim 1, wherein the lipid is a triglyceride and/or a very low density lipoprotein (VLDL) ~~and wherein the reagent reduces the amount of triglyceride and/or VLDL in the animal~~.

Claim 67. (Currently Amended) The method of Claim 6, wherein the lipid is a triglyceride or a very low density lipoprotein (VLDL) ~~and wherein the reagent reduces amount of triglyceride and/or VLDL in the animal.~~